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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,698	08/29/2003	David S. Goldberg	LEDGE-002	9205
34111	7590	11/01/2006	EXAMINER	
Bay Area Patent Group, LLC 13575 58TH ST. NORTH SUITE 175 CLEARWATER, FL 33760			GUIDOTTI, LAURA COLE	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/651,698	GOLDBERG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Laura C. Guidotti	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,41-43,46,47 and 55-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,41-43,46,47 and 55-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. It is noted that new claims 55-60 have the incorrect status identifier (see 37 CFR 1.121(c)) and are non-compliant. The Applicant used the status identifier "(newly presented)" however the correct status identifier is "(new)". The Applicant is required to use the correct status identifiers in the future.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 56-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of claims 56-60 recites the limitation "The mop head" in Line 1 (the preamble). There is insufficient antecedent basis for this limitation in the claim. The preamble of each of claims 56-60 is not consistent to that of claim 55, from which each of claims 56-60 depend.

Claim 57 recites the limitation "said mop head coupling element" in Lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 57 recites the limitation "the looped end" in Line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 58 recites the limitation "said mop head coupling element" in Lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 41-43, 47, and 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nordin, USPN 5,804,274 in view of <http://www.the-cloth.com/ourmicro.shtml> (herein referred to as "the-cloth website").

Nordin discloses the claimed invention including a mop head comprising a mop head coupling element (1; the base fabric), at least two cords that are separate and non-woven (2, see Figure one, there are at least two cords 2), each of the at least two cords comprising a plurality of filaments twisted together in a bundle (Column 2 Lines 57-65, particularly Lines 64-65), each of the plurality of filaments are of a denier from about 0.02 to about 0.99 (Column 2 Lines 57-65; Column 3 Lines 64-67, 0.3 Dtex, 0.3 Dtex converts to 0.27 denier), each of the at least two cords includes at least one end (see Figures) and each of the at least two cords are bundled together at their ends (they are bundled by a base fabric, Column 2 Lines 33-42) and are secured to the mop head coupling element (Column 4 Lines 6-16). The filament has a combination of polyester and nylon, specifically that it is about 70 to 90 percent polyester and about 10 to about 30 percent nylon (Column 3 Lines 64-67). Each cord has two ends secured to the mop head coupling element to form each of the cords into a loop (see Figures) and there appears to be about 2 to 500 cords secured to the coupling element (see Figures). There are about 1,000 to 50,000 filaments twisted to comprise each of the cords

Art Unit: 1744

(Column 3 Lines 64-67; each of the cords "2" have a thickness of 330 Dtex and since each filament which forms the yarn 1s 0.3 Dtex, each cord is about 1,000 filaments.)

The at least two cords are looped (see Figures) and a looped end (the end of the loop 2 not secured to the base fabric) is free from attachment with the mop head coupling element (Figure 1). Nordin does not include that a filament is a split filament that has a core member with a plurality of projections emanating from the core member and a wedge-shaped insert disposed between every other projection.

"The-cloth website" includes a cross section of a split micro fiber (left most picture on page 1) that illustrates a microfiber having a core member with a plurality of projections emanating therefrom and a wedge-shape insert disposed between every other projection. This fiber is used in a variety of fabrics, mops, and applications for cleaning and is 80% polyester and 20% nylon. The microfiber is durable and has a super absorbency.

It would have been obvious for one of ordinary skill in the art to substitute the filaments of Nordin for a split microfiber filament including a core member having a plurality of projections with wedge-shaped inserts disposed between every other projection, as "the-cloth website" teaches, in order to provide a microfiber filament that is advantageous to cleaning and is super absorbent.

4. Claims 1, 41-42, 55-56, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 224 900 in view of <http://www.the-cloth.com/ourmicro.shtml> (herein referred to as "the-cloth website").

EP 1 224 900 discloses the claimed invention including a mop head comprising a mop head coupling element (a "headpiece or band", paragraph 6), at least two cords that are separate and non-interwoven (paragraph 6), each of the at least two cords comprising a plurality of filaments twisted together in a bundle (paragraph 8), each of the plurality of filaments are of a denier from about 0.02 to about 0.99 (paragraph 7 states that the filaments are "microfibres" and from the Applicants own specification in paragraph 2, a microfiber(re) must be less than 1 denier), each of the at least two cords includes at least one end (a cord must inherently have one end; paragraphs 10-11) and each of the at least two cords are bundled together at their ends (they are bundled by tangling or welding, claims 2 or 5) and are secured to the mop head coupling element (see claims). The at least two cords are looped (in that they are "in a folded arrangement", paragraph 12). EP 1 224 900 does not include specific properties of the microfibre filaments.

"The-cloth website" discloses all elements above.

It would have been obvious for one of ordinary skill in the art to substitute the filaments of EP 1 224 900 for a split microfiber filament including a core member having a plurality of projections with wedge-shaped inserts disposed between every other projection comprising 80% polyester and 20% nylon, as "the-cloth website" teaches, in order to provide a microfiber element that is advantageous for cleaning and is super absorbent.

5. Claims 1, 41-43, 47, and 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nordin, USPN 5,804,274 in view of Dugan, USPN 6,465,095.

Nordin discloses all elements above.

Dugan discloses a type of yarn incorporating fibers and twisting at least two fibers or filaments together (Column 15 Lines 62-67) wherein the filaments are less than 1 denier, specifically 0.5 denier (Column 7 Lines 20-24). The filament comprises a combination of polyester and nylon material (Column 1 Lines 17-21; Column 2 Line 66 to Column 3 Line 10). The filaments are split (Abstract) to comprise a core member (central portion of "8" in Figure 1C), a plurality of projections (the portion of "8" that extends from the center of Figure 1C), and a wedge-shaped insert disposed between every other projection (6; Figure 1C; see additionally Column 7 Line 52 to Column 8 Line 18). The individual filaments are split or non-split (Column 16 Lines 20-23). The split filaments have good barrier properties and a high fiber surface area (Column 16 Lines 24-27).

It would have been obvious for one of ordinary skill in the art to substitute the filaments of Nordin for split microfiber filaments including a core member having a plurality of projections with wedge-shaped inserts disposed between every other projection, as Dugan teaches, in order to provide a microfiber filament that is advantageous to cleaning and to provide microfiber filaments that have a high fiber surface area.

6. Claims 46 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nordin, USPN 5,804,274 and <http://www.the-cloth.com/ourmicro.shtml> (herein referred to as "the-cloth website") as applied to claims 1 and 55 further in view of Wooley, USPN 6,131,731.



Nordin and “the-cloth website” disclose all elements mentioned above, however neither disclose that each of the two cords is treated with at least a solution of an antibacterial solution, fungicide, cleaning solution, deodorant, perfume, or coloring agent.

Wooley discloses a mop made of cords (210) having twisted filaments (310) and further includes impregnating the mop with a cleaning solution such as a germicidal agent (Column 5 Lines 56-60) so that medical areas may be cleaned effectively and efficiently (Column 1 Lines 5-9).

It would have been obvious for one of ordinary skill in the art to modify the mop head of Nordin and “the-cloth website” to have a cleaning solution, as Wooley teaches, in order to quickly, effectively, and efficiently clean and kill germs from an area.

### ***Response to Amendment***

7. The declarations of Goldberg, Dugan, and Mee under 37 CFR 1.132 filed 15 August 2006 is insufficient to overcome the rejection of claims 1, 41-43, 46-47, and 55-60 based upon Nordin, “the cloth website”, EP 1 224 900, Dugan, and Wooley as set forth in the last Office action because:

#### **I) Goldberg**

Paragraphs labeled as 4-4e and 7 discuss how “the invention recited in pending claim 1 of the Goldberg Application has experienced copying by others” and that “competitors...infringe *aspects* of the invention of claim 1.” However, merely stating that the claimed invention is being copied by others is insufficient. MPEP 716.06 states “*more than the mere fact of copying is necessary...because copying may be attributable*



Art Unit: 1744

to other factors such as a lack of concern for patent property or contempt for the patentees ability to enforce the patent. *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 226 USPQ 881 (Fed. Cir. 1985).

Paragraphs labeled 5-6 discuss that “the invention recited in pending claim 1 of the Goldberg Application has experienced commercial success” and that “the invention recited in pending claim 1 of the Goldberg Application has made dramatic roads into the market place and is displacing conventional products.” The statements of Paragraphs 5-6 are insufficient evidence of commercial success. MPEP 716.03 states “An affidavit or declaration attributing commercial success to a product or process “constructed according to the disclosure and claims of [the] patent application” or other equivalent language does not establish a nexus between the claimed invention and the commercial success because there is *no evidence* that the product or process which has been sold corresponds to the claimed invention, or *that whatever commercial success may have occurred is attributable to the product or process defined by the claims*. Ex parte Standish, 10 USPQ2d 1454, 1458 (Bd. Pat. App. & Inter. 1988). Also, gross sales figures do not show commercial success absent evidence as to market share, *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 226 USPQ 881 (Fed. Cir. 1985); or as to the time period during which the product was sold, or as to what sales would normally be expected in the market, Ex parte Standish, 10 USPQ2d 1454 (Bd. Pat. App. & Inter. 1988). The Examiner reminds the Applicant that (from MPEP 716.03) “An applicant who is asserting commercial success to support its contention of nonobviousness bears the burden of proof of establishing a nexus between the claimed

Art Unit: 1744

invention and evidence of commercial success. The Federal Circuit has acknowledged that applicant bears the burden of establishing nexus, stating: In the ex parte process of examining a patent application, however, the PTO lacks the means or resources to gather evidence which supports or refutes the applicant's assertion that the sale constitute commercial success. C.f. Ex parte Remark, 15 USPQ2d 1498, 1503 (Bd. Pat. App. & Int. 1990)(evidentiary routine of shifting burdens in civil proceedings inappropriate in ex parte prosecution proceedings because examiner has no available means for adducing evidence). Consequently, the PTO must rely upon the applicant to provide hard evidence of commercial success. In re Huang , 100 F.3d 135, 139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996).

## II) Dugan

Paragraphs 6-7 of Dugan states that "...it was not known to me at the time that microfilaments would have any superior absorptive behavior...", "...would have expected the typically hydrophobic surfaces of the microfilaments to be poorly suited for use in mops...", and "...the hydrophobic surfaces of the polymers typically envisioned for such splittable fibers would have led a person of skill to anticipate absorptive performance significantly inferior to that observed and inferior to incumbent mop fibers..." However, *one of ordinary skill in the art* would recognize that the general shape and basic geometry of the split fiber of Dugan would display absorptive behavior due to the open area (channels) between the split regions, regardless of Dugan's observations and conclusions. Also, whether unexpected results, such as the fibers to display superior absorptive behavior, are the result of unexpectedly improved results or

Art Unit: 1744

a property not taught by the prior art, the "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support."

### **III) Mee**

Paragraph 5 of Mee refer(s) only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716.

Paragraph 6 of Mee include(s) statements which amount to an affirmation that the affiant has never seen the claimed subject matter before. This is not relevant to the issue of nonobviousness of the claimed subject matter and provides no objective evidence thereof. See MPEP § 716.

### ***Response to Arguments***

8. Applicant's arguments filed 15 August 2006 have been fully considered but they are not persuasive.

Regarding the combinations of Nordin and "the-cloth website" and EP 1 224 900 and "the-cloth website", the Applicant contends that "the Patent Office has not established a prima facie case of obviousness", that "there is no suggestion or motivation by Nordin (and EP 1 224 900) or the-cloth website to substitute filaments of Nordin (and EP 1 224 900) for a split microfiber filament..." In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some

Art Unit: 1744

teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The Examiner respectfully finds these arguments not persuasive because Nordin and EP 1 224 900 each individually include all of the claimed subject matter found in claims 1 and 55 except that a filament is a split filament that has a core member with a plurality of projections emanating from the core member and a wedge-shaped insert disposed between every other projection. "The-cloth website" (although it may not specifically be drawn to a textile sheet of woven yarns) provides a teaching that *a split filament that has a core member with a plurality of projections emanating from the core member and a wedge-shaped insert disposed between every other projection is found to be advantageous in being super absorbent*. Specifically "The-cloth website" states "Microfiber...is a split fiber that has super absorbency (7X+ its weight in fluid) and the ultimate in cleaning properties..." Therefore, as stated above, it would have been obvious for one of ordinary skill in the art to substitute the filaments of Nordin or EP 1 224 900 for a split microfiber filament including a core member having a plurality of projections with wedge-shaped inserts disposed between every other projection, as "the-cloth website" teaches, in order to provide a microfiber filament that is advantageous to cleaning and is super absorbent. In response to applicant's argument that the Examiner's reason for the combination is not the purpose of the claimed invention to provide a filament that is advantageous to cleaning and is superabsorbent, the fact that applicant has recognized another

Art Unit: 1744

advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references of Nordin and Dugan, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Nordin includes all of the claimed subject matter found in claims 1 and 55 except that a filament is a split filament that has a core member with a plurality of projections emanating from the core member and a wedge-shaped insert disposed between every other projection. As previously stated, Dugan teaches a type of yarn incorporating fibers and twisting at least two fibers or filaments together wherein the filaments are less

Art Unit: 1744

than 1 denier, specifically 0.5 denier, the filament comprises a combination of polyester and nylon material, and the filaments are split to comprise a core member, a plurality of projections, and a wedge-shaped insert disposed between every other projection. The split filaments have good barrier properties and a high fiber surface area (Column 16 Lines 24-27). Therefore, it would have been obvious for one of ordinary skill in the art to substitute the filaments of Nordin for split microfiber filaments including a core member having a plurality of projections with wedge-shaped inserts disposed between every other projection, as Dugan teaches, in order to provide a microfiber filament that is advantageous to cleaning and to provide microfiber filaments that have a high fiber surface area. In response to applicant's argument that the Examiner's reason for the combination is not the purpose of the claimed invention to provide a filament that is advantageous to cleaning and to provide microfiber filaments that have a high fiber surface area, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d



Art Unit: 1744

1392, 170 USPQ 209 (CCPA 1971). See also statements made by the Examiner in finding the Declarations of Goldberg, Dugan, and Mee under 37 CFR 1.132 filed 15 August 2006 to be insufficient.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone



Art Unit: 1744

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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GLADYS JP CORCORAN  
SUPERVISORY PATENT EXAMINER